Marked Up Version Showing Changes Made

1. (Amended) A method for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, comprising:

setting a high threshold of a depth of the queue to a first value;

setting a low threshold of a depth of the queue to a second value lower than the first value;

detecting when the depth of the queue equals or exceeds the high threshold; [and]

raising the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold; and

selectively adjusting the low threshold when the depth of the queue equals or exceeds the high threshold.

4. (Amended) A method according to claim 2, further comprising the steps of [setting a low threshold of the depth of the queue to a value lower than the value of the high threshold; and]

reducing the value of the high threshold if the depth of the queue is equal to or less than the value of the low threshold; and

reducing the value of the low threshold if the depth of the queue is equal to or less than the value of the low threshold.

5. (Amended) A method for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, comprising:

starting at least one task for processing one or more messages stored in a queue;

setting a high threshold of a depth of the queue to a first value;

setting a low threshold of a depth of the queue to a second value lower than the first value; [and]

starting at least one additional task for processing the messages in the queue if the depth of the queue equals or exceeds the high threshold set to the first value; and

stopping at least one task for processing one or more messages stored in the queue if the depth of the queue is equal to or less than the value of the low threshold.

6. (Amended) A method according to claim 5, further comprising:

[setting] raising the value of the high threshold [to a second value greater than the first value] if the depth of the queue equals or exceeds the high threshold set to the first value.

7. (Amended) A method according to claim 6, further comprising:

starting at least one additional task for processing the messages in the queue if the depth of the queue equals or exceeds the raised value of the high threshold [set to the second value].

8. (Amended) A method according to claim 6, further comprising:

starting at least one additional task for processing the messages in the queue if the depth of the queue equals or exceeds the raised value of the high threshold [set to the second value] and the number of tasks currently processing the messages in the queue is less than a predetermined amount.

9. (Amended) A method according to claim 5, further comprising:

[setting a low threshold of the depth of the queue to a second value lower than the first value; and]

setting the high threshold to a third value lower than the first value if the depth of the queue is equal to or less than the low threshold set to the second value; and

setting the low threshold to a fourth value lower than the second value if the depth of the queue is equal to or less than the value of the low threshold.

10. (Amended) A computer system for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in the computer system, comprising:

means for setting a high threshold of a depth of the queue to a first value;

means setting a low threshold of a depth of the queue to a second value lower than the first value;

means for detecting when the depth of the queue equals or exceeds the high threshold; [and]

means for raising the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold; and

means for selectively adjusting the low threshold when the depth of the queue equals or exceeds the high threshold.

13. (Amended) A computer system according to claim 10, further comprising:

[means for setting a low threshold of the depth of the queue to a value lower than the value of the high threshold; and]

means for reducing the value of the high threshold if the depth of the queue is equal to or less than the value of the low threshold; and

means for reducing the value of the low threshold if the depth of the queue is equal to or less than the value of the low threshold.

14. (Amended) A computer program stored on a computer readable medium for detecting and reacting to changes in depth of one or more queues which store messages processed by tasks executing in a computer system, the computer program configured to:

set a high threshold of a depth of the queue to a first value;

set a low threshold of a depth of the queue to a second value lower than the first value;

detect when the depth of the queue equals or exceeds the high threshold; [and]

raise the high threshold by a predetermined increment each time the depth of the queue equals or exceeds the high threshold; and

selectively adjust the low threshold when depth of the queue equals or exceeds the high threshold.

17. (Amended) A computer program according to claim 14, further configured to:

[set a low threshold of the depth of the queue to a value lower than the value of the high threshold; and]

reduce the value of the high threshold if the depth of the queue is equal to or less than the value of the low threshold; and

reduce the value of the low threshold if the depth of the queue is equal to or less than the value of the low threshold.